

Eastwood[®]

DO THE JOB RIGHT.[®]

Part #31454

6" RANDOM ORBITAL SANDER/POLISHER

INSTRUCTIONS



The **EASTWOOD 6" RANDOM ORBITAL SANDER/POLISHER** is built to high quality standards to provide long life and smooth operation to serve the demands of the avid hobbyist and seasoned professional alike.

Compact and well balanced for fatigue-free use with a choice of handle types for maximum user comfort. Features a soft-start response to minimize polish spatter and an accurate, variable electronic speed control to help avoid paint surface damage or burn-through. The standard 5/16"-24 spindle thread accepts all 6" accessory pads with 5/16"-24 male threads.

CONTENTS

- (1) Random Orbital Sander/Polisher
- (1) Spindle Flat Wrench
- (1) 6" Hook and Loop Backing Pad
- (1) Foam Polishing Pad
- (1) 6" Hook and Loop, 80 Grit Abrasive Disk
- (1) Auxiliary "D" Handle
- (1) Auxiliary Palm Handle
- (2) M8 Socket Head Screws
- (2) Spare Motor Brushes



SPECIFICATIONS

- **Arbor Size:** 5/16"-24 [M6 x 1.0] female thread
- Replacement Sanding/Polishing Disk Size & Type: 6" Hook & Loop [152mm], min. 7,000 RPM rating, 5/16"-24 [M6 x 1.0] male thread
- **RPM:** 6,300 free speed, 1500 - 6300 RPM with soft start
- Variable speed, sealed ball bearing drive
- 120V, 5A motor
- 5/16" [8mm] orbit rotation

SAFETY INFORMATION

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING

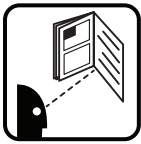
WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

CAUTION used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

⚠ NOTICE

NOTICE is used to address practices not related to personal injury.



⚠ READ INSTRUCTIONS

- Thoroughly read and understand these product instructions before using the Sander/Polisher.
- Keep these product instructions for future reference.



⚠ WARNING SHOCK HAZARD!

- Never operate or store Sander/Polisher in damp or wet conditions.
- Plug into a minimum 15 amp circuit. If using an extension cord, it must be AWG 16 or greater, no longer than 25'.



⚠ WARNING HEALTH & INJURY HAZARD!

- Dust and fine particulate matter is generated during the sanding/polishing process which can contain toxic substances such as lead, silica, solvents and others. Breathing this dust and fine particulate matter can cause many serious respiratory health conditions. Always use NIOSH approved respiratory protection while using this Sander.
- This Sander/Polisher will eject particles, dust and sparks at high velocity during operation. Wear approved eye and skin protection at all times while operating.
- Sanding and polishing can generate excessive noise. Wear appropriate hearing protection while using.
- The rotating pad of this Sander/Polisher can quickly catch loose clothing, long hair or jewelry causing serious personal injury. Keep all loose clothing, long hair and jewelry away from operating Sander/Polisher.
- This tool can quickly start up when handling while plugged in to electrical supply causing serious personal injury. Always unplug the tool from the electrical supply before changing pads or discs.



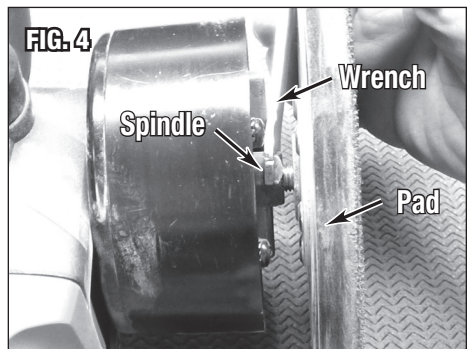
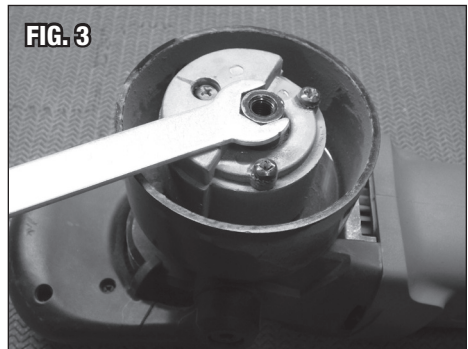
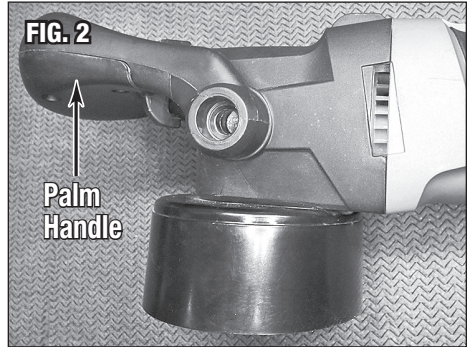
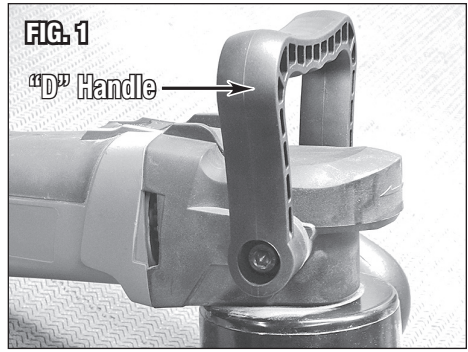


⚠️ WARNING HEALTH & INJURY HAZARD!

- Rotating abrasive discs can quickly remove flesh. Keep hands and fingers away from rotating pad and always wear protective work gloves while sanding.
- This tool can quickly and violently kick back or twist while operating causing severe hand and or wrist injury. Do not apply excessive force to tool while in use. Use only on broad, open spaces using care to avoid edges and corners. If smaller objects are being sanded, be sure they are securely mounted or anchored before beginning.
- Incorrectly rated pads and discs can disintegrate at high RPM causing serious personal injury. Always use replacement 6" pads and discs rated for 7,000 RPM operation or greater.
- Damaged pads or disks can disintegrate at high speed causing personal injury or property damage. If excessive vibration is felt, discontinue use immediately and disconnect tool from electrical supply. Inspect backing pad, disk and tool for damage. Do not resume use until resolution is found.
- This Sander/Polisher will eject a trail of sparks at high speed which can ignite flammable materials or injure others nearby. Do not operate in the vicinity of flammable materials and keep all persons and pets away from the work area.
- Always make sure the workpiece being sanded/polished is securely clamped or anchored to allow two handed operation of the tool.

SET-UP

1. Be sure the tool is unplugged before completing set-up.
2. The Sander/Polisher is supplied without a handle installed. For user convenience, there is a choice of a "D" style Handle or a front mounted "Palm" style.
 - To install the "D" Handle; place it over the raised, serrated pads of the tool body and rotate it to the position where it is most comfortable. Place the M8 Socket Head Cap Screws through the Handle mounting holes and into the threaded holes of the tool body (**FIG 1**).
 - Use a 6mm Hex Key (not included) to tighten the Screws.
 - To install the "Palm" Handle; locate the holes over the raised, serrated pads of the tool body with the locating fingers against the front of the tool body (**FIG 2**).
 - Place the M8 Socket Head Cap Screws through the Handle mounting holes and into the threaded holes of the tool body.
 - Use a 6mm Hex Key (not included) to tighten the Screws.
3. Slide the Spindle Flat Wrench over the Hex of the Spindle (**FIG 3**).
4. Thread the Backing Pad onto the spindle and hold the Spindle Flat Wrench until it is securely tightened.
5. Withdraw the Spindle Flat Wrench (**FIG 4**).
6. Apply the appropriate work pad (Buffing Pad, Sanding Disc etc.) for the job.
7. Plug into a minimum 15 amp circuit. If using an extension cord, it must be AWG 16 or greater, no longer than 25'.



GENERAL USE OF SANDER/POLISHER

1. Set the Speed Control on the desired speed. (See charts in appropriate sections).
2. While holding the Sander/Polisher securely in two hands, move the On-Off switch to the “ – “ ON position.
IMPORTANT NOTE: The built-in Soft-Start feature will cause a slight delay in motor starting and gradually increase in speed. This feature is designed to minimize splattering and flinging of polishing compound.
3. To stop, move the Switch to the “0” OFF position.

BUFFING/POLISHING

The ability to successfully buff out a paint finish requires a learning curve to properly master, that once learned, is a highly satisfying and valuable skill to have. It is best to practice first on old body panels acquired from a salvage yard before attempting to buff out a finish you care about. Possibly a neighbor or friend will have a vehicle with paint in poor condition that will allow you to practice on.

1. Wash vehicle thoroughly with a good quality car wash solution and a firm sponge.
Be sure to remove any tar, bug or tree residue.
2. Gently, dry the surface with a soft, lint free microfiber towel.
3. Cleaning all painted surfaces to be buffed with a clay bar is recommended.
Follow all package instructions carefully.
4. Mask all windows, wheels and any black painted areas or plastic trim pieces using plastic sheeting and masking tape.
NOTE: Flat or matte painted surfaces, vinyl graphics and plastic trim can be white-stained from the compound & polish.
5. Carefully and fully read all labels of Compound and Polishes before beginning any work or irreversible finish damage can result.
6. The use of Foam polishing pads is strongly recommended as they resist paint-burning heat buildup. The use of Wool pads is not recommended for beginners as they can quickly generate a high level of heat and burn through paint.
7. Always maintain lower machine speed levels to avoid generating excessive heat and paint damage.
8. Determine the paint condition or level of damage to be restored.
NOTE: Always start with the mildest pad and polish combination that will do the job and work toward the next mildest combination to achieve the best results with minimum work. The chart at right will help determine the proper product combination for specific paint conditions.

Paint Condition	Product Recommendations and Machine Speed
Deeper scratches in clear coat	<ul style="list-style-type: none"> • Foam Cutting Pads and heavier Cutting Compound • 2500 - 3000 RPM • 2-3 on the Eastwood Buffer Dial
Mild abrasions (not through clear coat or to primer)	
Acid rain or chemical etching	
Bird dropping stains	
Paint overspray	
Weathering dullness	
Light orange peel	
Follow-up to wet sanding	
Follow-up for Cutting Pad & compound swirls	<ul style="list-style-type: none"> • Foam Polishing Pads and lighter Polishing Compound • 1400 - 1600 RPM • 1 on the Eastwood Buffer Dial
Minor clear coat scratches & abrasions	
Water spots	
Surface haze	
Minor staining	
Swirl removal	<ul style="list-style-type: none"> • Mild Foam Finessing Pads and abrasive-free wax or polish • 1400 - 1500 RPM • 1 on the Eastwood Buffer Dial
Wax/Polish application	

9. Never push down on or apply pressure to the Buffer while running. Let the spinning pad do the work.
10. Apply a several inch long bead of polishing compound to work surface or to face of pad.
NOTE: Be sure to follow the buffing compound manufacturer's bottle instructions carefully! With the switch off, spread the compound around the work surface with the pad.
11. Try (if possible) to work in a 2' x 1' area and move in long, overlapping rows. Never stop the machine in one spot or pad overheating could occur.
12. Generally, when the compound dries and disappears, stop the machine, wipe the residue off with a clean microfiber cloth and check your progress. Be sure to follow the buffing compound manufacturer's bottle instructions.

SANDING/CLEANING

Set the Thumbwheel Speed Control on the desired speed. The chart below will help determine the best setting for general conditions. Individual requirements may vary.

Work Surface	Abrasive/Cleaning Disk Recommendations & Machine Speed
Removing moderate rust	<ul style="list-style-type: none">• P40 - P240 Grit• 5000 - 6000 RPM• 5-6 on Eastwood Buffer Dial
Removing old paint finish	
Rough shaping body filler	
Removing light surface rust	<ul style="list-style-type: none">• P320 - P600 Grit• 4000 - 5000 RPM• 4-5 on Eastwood Buffer Dial
Removing old paint finish	
Finish shaping body filler	

THUMBWHEEL SPEED NUMBER / RPM EQUIVALENCY

Note that the Thumbwheel Speed Control is infinitely variable and actual RPM will vary widely based on the actual position of the Thumbwheel and numerous factors such as actual current input to tool, rotating mass weight of pad and disk, ambient operating temperature and degree of tool wear.

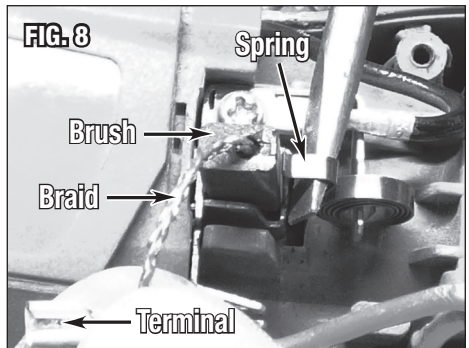
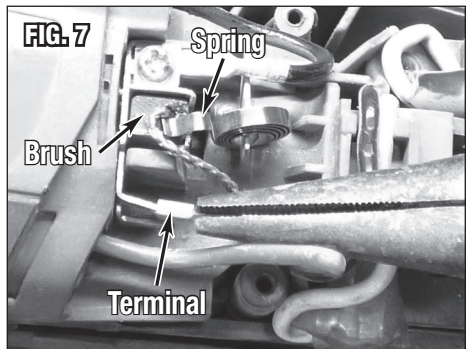
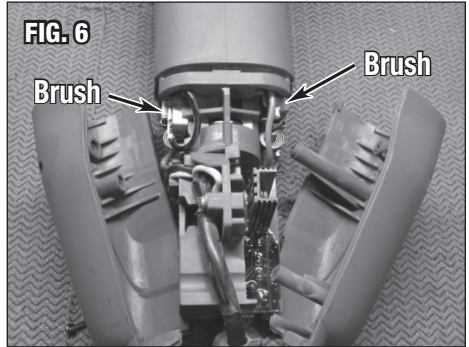
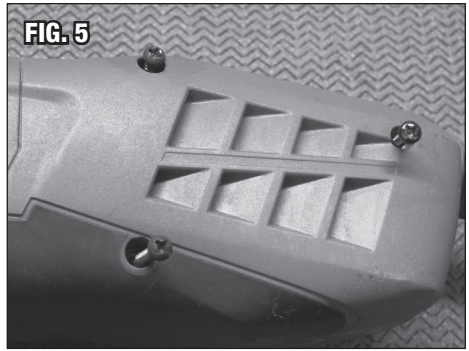
THE FOLLOWING FIGURES ARE APPROXIMATE:

- 1 = 1400 RPM
- 2 = 2400 RPM
- 3 = 4000 RPM
- 4 = 5200 RPM
- 5 = 5900 RPM
- 6 = 6200 RPM

BRUSH REPLACEMENT

If motor fails to start as trigger is depressed after extensive use, the Motor Brushes are likely worn and need to be replaced.

1. Remove the Rear Motor Housings (one each side) by removing (3) screws on the left side with a #3 Phillips screw-driver (**FIGS 5-6**).
2. Remove the spade connector at the end of the braided brush lead from the terminal by gripping with needle nose pliers and pulling outward (**FIG 7**).
3. Placing a small straight-blade screw-driver under the wound-spring tab, lift up and out to release spring tension from brush and pull straight out of shell (**FIG 8**).
4. Inspect Brush.
NOTE: Brushes are considered worn if less than 1/8" of carbon is remaining).
5. Replace with new brush.
NOTE: The carbon contact goes in first and is keyed to the rectangular socket. Release spring tension and allow spring tab to exert pressure on the top of the brush.
6. Repeat above procedure for opposite brush.
7. Replace Rear Motor Housings, replace and tighten screws.



ADDITIONAL ITEMS

- #15736 Eastwood Film-Backed, Hook & Loop Sandpaper, 320 Grit, 5-pack
- #15737 Eastwood Film-Backed, Hook & Loop Sandpaper, 400 Grit, 5-pack
- #15738 Eastwood Film-Backed, Hook & Loop Sandpaper, 600 Grit, 5-pack
- #15739 Eastwood Film-Backed, Hook & Loop Sandpaper, 800 Grit, 5-pack
- #15740 Eastwood Film-Backed, Hook & Loop Sandpaper, 1000 Grit, 5-pack
- #15741 Eastwood Film-Backed, Hook & Loop Sandpaper, 1200 Grit, 5-pack
- #15742 Eastwood Film-Backed, Hook & Loop Sandpaper, 1500 Grit, 5-pack

If you have any questions about the use of this product, please contact

The Eastwood Technical Assistance Service Department: 800.343.9353 >> email: tech@eastwood.com

PDF version of this manual is available at eastwood.com

The Eastwood Company 263 Shoemaker Road, Pottstown, PA 19464, USA

800.343.9353 eastwood.com